

CLAIMS

1. An in-mold decorated molded article, comprising:

a transparent molded resin body (1) which is
5 flattened in a thickness direction of the molded resin body
and includes at least a side face (1c) on which a side gate
mark (2, 2a) is formed;

a coating layer (3) which is formed on a top
surface (1a) of the transparent molded resin body (1), for
10 covering an edge part of the top surface adjacent to the
side face (1c) of the molded resin body with the side gate
mark (2, 2a) formed, in order for the side gate mark not to
be seen from the top surface of the molded resin body; and

a decorative layer (4) which is formed on a
15 bottom surface (1b) of the molded resin body (1).

2. The in-mold decorated molded article as set forth
in claim 1, wherein a thickness of the side gate mark (2,
2a) in the thickness of the molded resin body is 0.4 mm or
more, and an angle made between a cross-section of the side
20 gate mark (2, 2a) and the thickness direction of the molded
resin body is 0 to 60°.

3. The in-mold decorated molded article as set forth
in claim 1, wherein the coating layer (3) is formed on an
entire surface of the edge part of the top surface adjacent
25 to the side face (1c) on which the side gate mark (2, 2a)

is formed.

4. The in-mold decorated molded article as set forth in claim 1, wherein the coating layer (3) is formed to have a width along the side face which is approximately equal to a size of the side gate mark (2, 2a) along the side face.

5. The in-mold decorated molded article as set forth in claim 1, wherein in a cross section along the thickness direction of the side face and a perpendicular direction of the side face of the molded resin body (1), the coating layer (3) covers the edge part of the top surface of the molded resin body, in order for the side gate (2, 2a) mark not to be seen from the top surface of the molded resin body so that an angle is 45° or more, which is made between a virtual line (40) connecting an end part (3a) of the coating layer away from the side face (1c) to a lower end (4a) part of the side face, and the thickness direction of the molded resin body (1).

6. The in-mold decorated molded article as set forth in claim 1, wherein the molded resin body (1) is a resin panel provided with a display screen part (50), and the side gate mark (2, 2a) is formed adjacent to the display screen part (50).

7. A manufacturing method of an in-mold decorated molded article comprising:

arranging a first decorative sheet (11) provided

with at least a first transfer layer (35), at a boundary between a side gate (19a) and a space for molding (17), in a first mold (15) of an injection mold and arranging a second decorative sheet (12) provided with at least a second transfer layer (35) in a second mold (16) of the injection mold;

forming the space for molding (17) by closing of the first mold (15) and the second mold (16), thereafter injecting a molding resin into the space for molding (17) through the side gate (19a) to form the injection-molded article and at the same time integrally bonding the first decorative sheet (11) and second decorative sheet (12) onto a surface of the molded article so that the first transfer layer (35) and the second transfer layer (36) are transferred on the surface of the injection-molded article, and

taking out the in-mold decorated molded article from the first mold (15) and the second mold (16), and cutting the injected resin (19) formed by the side gate (19a) in an angle of less than 60° to a thickness direction of the injection-molded article to obtain the in-mold decorated molded article.

8. The manufacturing method of the in-mold decorated molded article as set forth in claim 7, wherein the injected resin is cut in an angle of approximate 0° to the

thickness direction of the injection-molded article.